

Hello. I'm Cathy Seidel, Deputy Chief of the Wireless Telecommunications Bureau at the FCC. In my presentation today, I'm going to provide you with information about the Commission's action at improving public safety communications in the 800 MHz band.

As you know, many of our nation's first responders use the 800 MHz band for critical public safety communications. For this reason, 800 MHz has become a linchpin in their ability to communicate effectively. Since 1999 however, public safety systems in the band have experienced increasing levels of interference from commercial mobile radio services. In response, in April of 2000, the Commission brought together representatives from public safety and the commercial industry to discuss the problem. As an outcome of the meeting, the parties published the "best practices guide" which established voluntary technical modifications and procedures to reduce interference. The "best practices guide" and the technical measures adopted therein represented an enormous amount of effort and an almost unprecedented level of cooperation among 800 MHz users.

Unfortunately, though, the voluntary "best practices" has failed to eliminate all instances of interference. On the contrary, reports of interference have actually increased, demonstrating that voluntary measures alone are not sufficient to address the problem of interference in 800 MHz. In light of these circumstances, the Commission has concluded that absent action, the inevitable increase in interference incidences would impede the reliability of critical public safety communications.

In developing a plan to address the interference in the 800 MHz band, then, the Commission kept a number of important goals in mind. First and most importantly, the Commission looked to ensure the resolution of interference to public safety radio systems. This has always been the Commission's priority throughout the proceeding. In addition, the Commission looked to ensure equitable treatment of all licensed users within 800 MHz with minimal disruption to the users and to the public. The Commission also looked to ensure that it administered the spectrum for the public good while exercising sound principles of spectrum management. And then fourth, the Commission looked to provide additional 800 MHz spectrum that could be accessed and used by public safety entities.

Now I'll talk to you about the action the Commission took in its order of August of this year. In order to effectively address the interference problem, the Commission adopted a two-pronged approach. First, to more adequately address individual interference complaints in the near term, the Commission adopted certain interference abatement measures, including an objective technical standard to define unacceptable interference for purposes of the proceeding. The Commission also established a set of procedures for the expeditious resolution of interference that did arise through the use of a variety of measures, known as "enhanced best practices."

Second, over the long term, the Commission adopted a plan to separate public safety, critical infrastructure, and other noncellular users from systems that employ a cellular architecture in the band.

Now, under the first prong of the Commission's two part 800 MHz solution, the Commission adopts an objective technical standard for determining when a public safety or other noncellular licensee is entitled to interference protection. Specifically, any noncellular licensee receiving unacceptable interference, as defined by the Commission, is entitled to interference protection. Unacceptable interference is defined for purposes of the proceeding as interference that occurs in an area in which the public safety system is providing an adequate signal. Under this approach, mobile or portable receivers located near a cell site should be free from potential interference from ESMR carriers and cellular telephone systems.

Specifically, the Commission adopted certain procedures to facilitate the abatement of unacceptable interference. First, the Commission adopted rules requiring enhanced ESMR and cellular telephone licensees to furnish to requesting public safety and critical infrastructure entities with at least 10 days prior notice before adding new cell sites or modifying existing cell sites. In turn, public safety and critical infrastructure entities that are receiving such information are obliged to inform the enhanced SMR and cellular telephone licensees whenever they change their system parameters. In addition, licensees operating cellular architecture systems in the 800 MHz band are required to establish a single common point for the receipt of interference complaints. Once such notification is made, carriers having a cell site within 5000 feet of such complaint must respond.

Second, any SMR or cellular telephone licensee that causes or contributes to unacceptable interference to public safety and noncellular licensees is responsible for abating it promptly and doing so at its own expense.

Third, the Commission also provides for a standardized process for reporting 800 MHz interference complaints, identifying its source, and implementing a solution. The Commission also specifies information that must be included in initial interference complaints, and the Commission specifies certain steps that enhanced SMR and cellular telephone licensees must take upon receiving such complaints.

Now, the second prong of the Commission's solution to the 800 MHz interference problem is a longer term course of action, that being reconfiguration of the 800 MHz band. By reconfiguring the band, the Commission is able to address the root cause of the problem, and therefore provide a sustainable solution to the problem. Right now there is a fundamentally incompatible mix of two types of communication systems in the 800 MHz band: cellular architecture multicell systems used by cellular telephone companies and ESMR licensees; and high-site systems used by public safety, private wireless and noncellular SMR users. The Commission's band realignment separates these generally incompatible technologies by spectrally segregating high-site systems, such as those used by public safety, from low-site ESMR and cellular systems.

Now, here's what the current 800 MHz band looks like. The general category consists of six economic area blocks of 25 channels each for SMR. You'll notice that some site-based incumbents currently operate in this portion of the band. The interleaved portion of the band consists of 250 channels for public safety, business, industrial land

transportation, or SMR use. The public safety BILT channels are licensed on a site by site basis. The SMR channels are licensed by economic areas, or EAs. The upper 200 portion of the band consists of 200 channels for SMR operations licensed on an EA basis. And then finally, the national public safety planning advisory council, or NPSPAC band, consists of 225 channels spaced every 12.5 KHz for public safety operation.

Now, here's what the band plan will look like following reconfiguration. Enhanced SMR systems will be segregated from noncellular and placed in opposite segments of the 800 MHz band. The new band plan then eliminates the interference-prone interleaving of ESMR and public safety systems. The Commission designates 14 MHz in the upper portion of the 800 MHz band for enhanced SMR systems, while designating 18 MHz in the lower portion of the 800 MHz band for use by public safety, critical infrastructure, and noncellular systems. As part of the plan, Nextel will completely relinquish rights to all the interleave channels and will relocate its systems operating on the general category channels to the upper portion of the 800 MHz band. The Commission has included an expansion band in the 815 to 816 and 860 to 861 MHz segment of the band to provide public safety licensees additional spectral separation from the cellular portion of the band. The Commission also provided for a guard band in the 816 to 817 and 861 to 862 MHz segment to guarantee public safety licensees an additional 1 MHz of spectral separation from the cellular portion of the band. Nextel will vacate the guard band.

As you can see, the reconfigured band will result in a number of benefits to public safety. In addition to providing much needed relief from interference, the reconfigured band will provide the public safety community with an average of an additional 4.5 MHz of spectrum in 800 MHz in areas where the shortage of public safety spectrum is most acute. This additional spectrum is sufficient to provide for 90 two-way channels for public safety and critical infrastructure. The reconfigured band will also provide public safety with opportunities to realize interoperability with adjacent 700 MHz public safety systems.

As you might imagine, reconfiguration of the 800 MHz band will be costly. As the Commission determined in the Report and Order, however, a decision not to reband 800 MHz would be even more costly over the long-term. Nextel will bear the cost of band reconfiguration. Nextel will be responsible for the full cost of relocation of all 800 MHz band public safety systems and other 800 MHz band incumbents to their new spectrum assignments with comparable facilities. The Commission requires Nextel to secure its financial obligations by means of a \$2.5 billion letter of credit. Moreover, the Commission declined to cap Nextel's financial obligation by instead requiring Nextel to pay all costs of reconfiguration as identified in the Report and Order.

Now, in exchange for Nextel's surrender of certain spectrum rights, as well as its financial obligations in accomplishing 800 MHz band reconfiguration, the Commission will modify certain Nextel licenses to provide Nextel with nationwide authority to operate in 10 MHz of spectrum in the 1.9 GHz band. The Commission will credit Nextel for the value of the spectrum rights that Nextel will relinquish, and the actual cost for relocation of incumbents in 800 MHz and 1.9 GHz. To the extent that these combined

credits total less than the determined value of the 1.9 GHz spectrum, Nextel will make a payment to the U.S. treasury at the end of the relocation process in an amount equal to the difference.

Now, to ensure a smooth transition to the new 800 MHz band plan, the relocation process will be managed by an independent transition administrator. A committee will recommend the transition administrator, who will perform a variety of administrative functions. The transition administrator will oversee the administrative and financial aspects of the band reconfiguration process; it will provide accountability and reporting functions; it will ensure that reconfiguration is achieved with minimal disruption to the licensees, especially public safety licensees; it will direct disbursement of funds for band reconfiguration based on requests for payment by the affected parties; and it will help to resolve disputes among the parties. Should any disputes not be resolved by mediation with the transition administrator, the transition administrator will forward the record to the Commission, and the Commission will review and resolve the matter on its own.

Implementation of the band reconfiguration will take place according to a scheduled phased approach. The transition administrator search committee started its deliberations and will select a transition administrator during October of this year. Once that occurs, the transition administrator will have 30 days to produce a schedule detailing when band reconfiguration will start in each NPSPAC region. Once the rebanding clock is started, Nextel will have 36 months to complete the process. As an interim milestone, within 18 months Nextel must complete, and the transition administrator must certify, that Nextel completed their clearing of channels 1 to 120 in 20 NPSPAC regions.

To help you gain a better understanding of how the process will work, I will go through, step by step, how we see it working. First, the transition administrator will notify a licensee that its system needs to be relocated in order to complete band reconfiguration. The transition administrator will specify a replacement channel for each channel on the system that must be moved. The licensee will then obtain an estimate of the cost to reconfigure its system and will provide that estimate to the transition administrator or to Nextel. In any event, the licensee must certify that the funds requested are those necessary to provide facilities comparable to those presently in use. The transition administrator will review those estimates, including an analysis to make sure that the costs don't exceed the costs of providing comparable facilities, and if the review indicates that there is a need for additional information, or if the information is somehow deficient, the licensee will be notified by the transition administrator to furnish a revised estimate.

The transition administrator will facilitate the resolution of any disputes that may arise, including, if necessary, acting as an intermediary between the licensee and Nextel. All parties in the process are bound by an obligation of good faith that requires them to deal promptly and cooperatively with one another. Licensees that fail to act in good faith or unreasonably decline to cooperate may be subject to enforcement action.

Now, once the estimate has been approved, the transition administrator then will direct payment of the estimated funds to the licensee if it elects to do its own reconfiguration, or

to contractors that have been retained by the licensee. And then, finally, the licensee would begin operating on the new channel post-reconfiguration.

Finally, I'd like to provide you with URLs to relevant Commission web sites that can provide you with additional information. By accessing these web sites, you can find the text of the 800 MHz decision itself as well as other general information about the 800 MHz proceeding. As you can see, the Commission is proactively taking measures to improve public safety communications in the 800 MHz band.

This concludes my presentation. I invite you to look at the FCC's web site or to contact us directly in the event you have additional questions. Either I or someone in the Wireless Bureau will be happy to help you.  
Thank you.